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(FILE 'HOME' ENTERED AT 17:50:40 ON 22 AUG 2001)

FILE 'HCAPLUS' ENTERED AT 17:51:08 ON 22 AUG 2001

L1 12118 S CORYNEFORM BACTERIA OR (BACTERIA (L) CORYNEFORM) OR CORYNEBAC
L2 328 S (ARGININE (A) REPRESSOR) OR (REPRESSOR# (L) ARGININE) OR ARGR
L3 4 S L1 AND L2

FILE 'HCAPLUS' ENTERED AT 17:53:17 ON 22 AUG 2001

FILE 'REGISTRY' ENTERED AT 17:53:52 ON 22 AUG 2001

L4 1 S 74-79-3 /RN

FILE 'HCAPLUS' ENTERED AT 17:54:00 ON 22 AUG 2001

FILE 'REGISTRY' ENTERED AT 17:54:13 ON 22 AUG 2001

SET SMARTSELECT ON
L5 SEL L4 1- CHEM : 14 TERMS
SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 17:54:14 ON 22 AUG 2001

L6 88184 S L5
L7 1951 S L6 (L) PREP/RL
L8 62 S L1 (L) L7
L9 0 S L8 (L) L2
L10 0 S L8 AND L2
L11 2 S L7 (L) L2

=> diall 1-2

L11 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:376237 HCAPLUS

DOCUMENT NUMBER: 131:210482

TITLE: Probing Activation of the Prokaryotic Arginine
Transcriptional Regulator Using Chimeric Proteins
AUTHOR(S): Holtham, Carol A. M.; Jumel, Kornelia; Miller, Coleen
M.; Harding, Stephen E.; Baumberg, Simon; Stockley,
Peter G.

CORPORATE SOURCE: University of Leeds, Leeds, LS2 9JT, UK

SOURCE: J. Mol. Biol. (1999), 289(4), 707-727

CODEN: JMOBAK; ISSN: 0022-2836

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

CLASSIFICATION: 6-1 (General Biochemistry)
Section cross-reference(s): 10

ABSTRACT:

The major transcription factors controlling arginine metab. in *Escherichia coli* and *Bacillus subtilis*, ArgR and AhrC, resp., are homologous multimeric proteins that form L-arginine-dependent DNA-binding complexes capable of repressing transcription of the biosynthetic genes (both), activating transcription of catabolic genes (AhrC only) or facilitating plasmid dimer resolu. (both). Multimerization and L-arginine binding are assocd. with the C-terminal 70-80 residues; the N-terminal regions contain a winged helix-turn-helix DNA-binding domain. We have constructed chimeric genes in which the sequences for the N- and C-terminal domains have been swapped. The resultant chimeric proteins and their corresponding native proteins have been analyzed for their ability to form multimers and bind DNA operator sites in an L-arginine-dependent fashion. Gel filtration and equil. sedimentation anal. are consistent with the formation of hexamers by all four proteins in the presence of L-arginine and at high protein concns. (>100 nM monomer). The hexamer sedimentation coeffs. suggest that there is a redn. in mol. vol. upon binding L-arginine, consistent with a conformational change accompanying an allosteric activation of DNA-binding. In the absence of L-arginine or at lower protein concns., the hexamers are clearly in rapid equil. with smaller subunits, whose dominant species appear to be based on trimers, as expected from the crystal structure of the ArgR C-terminal fragment, with the exception of the ArgR-C chimera, which apparently dissociates into dimers, suggesting that in the intact protein the DNA-binding domains may have a significant dimeric interaction. The hexamer-trimer K_d is in the micromolar range, suggesting that trimers are the principal species at in vivo concns. DNA binding by all four proteins has been probed by gel retardation and DNase I footprinting anal. using all three types of naturally occurring operators: biosynthetic sites encompassing two 18 bp ARG boxes sepd. by 2 bp; biosynthetic sites contg. two such boxes and a third 18 bp ARG box at a distance of 100 bp downstream, i.e. within the structural gene; and finally a catabolic operator which contains a single ARG box site. The data show that all four proteins bind to the operators at the expected regions in an L-arginine-dependent fashion. From the apparent affinities of the chimeras for each target site, there is no obvious sequence-specificity assocd. with the N-terminal domains; rather the data can be interpreted in terms of differential allosteric activation, including DNA binding in the absence of L-arginine. Remarkably, the proteins show apparent "anti-competition" in the presence of excess, specific DNA fragments in gel retardation. This appears to be due to assembly of an activated form of the protein, probably hexamers, on the operator DNA. The data are discussed in terms of the current models for the mode of action of both native proteins. (c) 1999 Academic Press.

SUPPL. TERM: arginine transcription factor chimera operator

INDEX TERM: Fusion proteins (chimeric proteins)

Transcription factors

ROLE: BAC (Biological activity or effector, except adverse);

BPN (Biosynthetic preparation); BIOL (Biological study);

PREP (Preparation)

(ArgR and AhrC; probing activation of
prokaryotic **arginine** transcriptional regulator
using chimeric proteins)

INDEX TERM: Genetic element
ROLE: BPR (Biological process); BIOL (Biological study);
PROC (Process)
(operator; probing activation of prokaryotic arginine
transcriptional regulator using chimeric proteins)

INDEX TERM: Molecular recognition
(probing activation of prokaryotic arginine
transcriptional regulator using chimeric proteins)

INDEX TERM: Quaternary structure
(protein; probing activation of prokaryotic arginine
transcriptional regulator using chimeric proteins)

INDEX TERM: 74-79-3, L-Arginine, biological studies
ROLE: BAC (Biological activity or effector, except adverse);
BIOL (Biological study)
(probing activation of prokaryotic arginine
transcriptional regulator using chimeric proteins)

REFERENCE COUNT: 39

REFERENCE(S):

- (1) Boys, C; J Mol Biol 1990, V213, P227 HCAPLUS
- (2) Burke, M; Mol Microbiol 1994, V13, P609 HCAPLUS
- (3) Calogero, S; J Bacteriol 1994, V176, P1234 HCAPLUS
- (4) Chen, S; Mol Microbiol 1997, V24, P1143 HCAPLUS
- (5) Colfen, H; Eur Biophys J 1996, V24, P159
- (6) Colfen, H; Eur Biophys J 1997, V25, P333
- (7) Creeth, J; J Biochem Biophys Methods 1982, V7, P25
HCAPLUS
- (8) Czaplewski, L; Mol Microbiol 1992, V6, P267 HCAPLUS
- (9) Debarbouille, M; Proc Natl Acad Sci USA 1991, V88, P9092
HCAPLUS
- (10) Gardan, R; J Mol Biol 1995, V249, P843 HCAPLUS
- (11) Gill, S; Anal Biochem 1989, V182, P319 HCAPLUS
- (12) Glansdorff, N; Cellular and Molecular Biology 1987,
P321 HCAPLUS
- (13) Grandori, R; J Mol Biol 1995, V254, P150 HCAPLUS
- (14) Harding, S; Analytical Ultracentrifugation in
Biochemistry and Polymer Science 1992, P275
HCAPLUS
- (15) Harding, S; Biophys Chem 1995, V55, P69 HCAPLUS
- (16) Harwood, C; J Gen Microbiol 1977, V100, P177 HCAPLUS
- (17) Kim, H; Chem Rev 1977, V77, P659 HCAPLUS
- (18) Klingel, U; Mol Gen Genet 1995, V248, P329 HCAPLUS
- (19) Laue, T; Analytical Ultracentrifugation in Biochemistry
and Polymer Science 1992, P90 HCAPLUS
- (20) Lim, D; Proc Natl Acad Sci USA 1987, V84, P6697 HCAPLUS
- (21) Maas, W; Microbiol Rev 1994, V58, P631 HCAPLUS
- (22) McRorie, D; Self-associating Systems in the Analytical
Ultracentrifuge 1993
- (23) Miller, C; Mol Microbiol 1997, V26, P37 HCAPLUS
- (24) Miller, C; PhD thesis Department of Biology University
of Leeds 1996
- (25) Mountain, A; Mol Gen Genet 1980, V178, P691 HCAPLUS
- (26) North, A; Gene 1989, V80, P29 HCAPLUS
- (27) Perkins, S; Eur J Biochem 1986, V57, P169
- (28) Silkowski, H; Eur Biophys J 1977, V25, P455
- (29) Smith, M; Gene 1986, V49, P53 HCAPLUS
- (30) Smith, M; Mol Gen Genet 1986, V205, P176 HCAPLUS
- (31) Smith, M; Mol Microbiol 1989, V3, P23 HCAPLUS
- (32) Stockley, P; Biosensors Bioelect 1998, V13, P637
HCAPLUS
- (33) Studier, F; Methods Enzymol 1990, V185, P60 HCAPLUS
- (34) Sunnerhagen, M; Nature Struct Biol 1997, V4, P819

HCAPLUS

- (35) Tanford, C; Physical Chemistry of Macromolecules 1961, V381
- (36) Tian, G; J Mol Biol 1992, V226, P387 HCAPLUS
- (37) Tian, G; Mol Microbiol 1994, V13, P599 HCAPLUS
- (38) van Duyne, G; J Mol Biol 1996, V256, P377 HCAPLUS
- (39) Williams, J; Ultracentrifugation of Macromolecules:Modern Topics 1973, V50

L11 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:591225 HCAPLUS
 DOCUMENT NUMBER: 127:244501
 TITLE: Purification and characterization of an arginine regulatory protein, ArgR, from Pseudomonas aeruginosa and its interactions with the control regions for the car, argF, and aru operons
 AUTHOR(S): Park, Seung-Moon; Lu, Chung-Dar; Abdelal, Ahmed T.
 CORPORATE SOURCE: Department Biology, Georgia State University, Atlanta, GA, 30303, USA
 SOURCE: J. Bacteriol. (1997), 179(17), 5309-5317
 CODEN: JOBAAY; ISSN: 0021-9193
 PUBLISHER: American Society for Microbiology
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 CLASSIFICATION: 6-3 (General Biochemistry)
 Section cross-reference(s): 3

ABSTRACT:

Pseudomonas aeruginosa ArgR, a regulatory protein that plays a major role in the control of certain biosynthetic and catabolic arginine genes, was purified to homogeneity. ArgR was shown to be a dimer of two equal subunits, each with a mol. mass of 37,000 Da. Detn. of the N-terminal amino acid sequence showed it to be identical to that predicted from the derived sequence for the argR gene. DNase I footprinting showed that ArgR protects a region of 45 to 47 bp that overlaps the promoters for the biosynthetic car and argF operons, indicating that ArgR exerts its neg. control on the expression of these operons by steric hindrance. Studies were also carried out with the aru operon, which encodes enzymes of the catabolic arginine succinyl-transferase pathway. Quant. S1 nuclease expts. showed that expression of the first gene in this operon, aruC, is initiated from an arginine-inducible promoter. Studies with an aruC--lacZ fusion showed that this promoter is under the control of ArgR. DNase I expts. indicated that ArgR protects two 45-bp binding sites upstream of aruC; the 3' terminus for the downstream binding site overlaps the -35 region for the identified promoter. Gel retardation expts. yielded apparent disocn. consts. of 2.5.times.10⁻¹¹, 4.2.times.10⁻¹², and 7.2.times.10⁻¹¹ M for carA, argF, and aruC operators, resp. Premethylation interference and depurination expts. with the car and argF operators identified a common sequence, 5'-TGTCGC-3', which may be important for ArgR binding. Alignment of ArgR-binding sites reveals that the ArgR-binding site consists of two half-sites, in a direct repeat arrangement, with the consensus sequence TGTCGCN8AAN5.

SUPPL. TERM: arginine repressor protein ArgR Pseudomonas
 INDEX TERM: Operons
 (argF, aru, and car; purifn. and characterization of an arginine regulatory protein, ArgR, from Pseudomonas aeruginosa and its interactions with the control regions for the car, argF, and aru operons)
 INDEX TERM: Transcription factors
 ROLE: BAC (Biological activity or effector, except adverse);
 PUR (Purification or recovery); BIOL (Biological study);
 PREP (Preparation)
 (gene **argR**; purifn. and characterization of an **arginine** regulatory protein, **ArgR**, from Pseudomonas aeruginosa and its interactions with the

control regions for the car, argF, and aru operons)

INDEX TERM: DNA sequences
 (of ArgR repressor binding sites in Pseudomonas
 aeruginosa car, argF, and aru operons)

INDEX TERM: Pseudomonas aeruginosa
 (purifn. and characterization of an arginine regulatory
 protein, ArgR, from Pseudomonas aeruginosa and its
 interactions with the control regions for the car, argF,
 and aru operons)

INDEX TERM: Operator (genetic element)
 ROLE: BPR (Biological process); BIOL (Biological study);
 PROC (Process)
 (purifn. and characterization of an arginine regulatory
 protein, ArgR, from Pseudomonas aeruginosa and its
 interactions with the control regions for the car, argF,
 and aru operons)

INDEX TERM: 74-79-3, Arginine, biological studies
 ROLE: BSU (Biological study, unclassified); BIOL (Biological
 study)
 (catabolic genes for; purifn. and characterization of an
 arginine regulatory protein, ArgR, from Pseudomonas
 aeruginosa and its interactions with the control regions
 for the car, argF, and aru operons)

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(FILE 'HOME' ENTERED AT 16:06:30 ON 22 AUG 2001)

FILE 'HCAPLUS' ENTERED AT 16:09:39 ON 22 AUG 2001

L1 787 S CORYNEFORM BACTERIA OR BACTERIA (L) CORYNEFORM
L2 58 S ARGININE (A) REPRESSOR
L3 0 S L1 (L) L2
L4 0 S L1 AND L2
E CORYNEFORM BACTERIA
E CORYNEFORM BACTERIA/CT
E E3+ALL
E ARGININE/CT

FILE 'REGISTRY' ENTERED AT 16:11:19 ON 22 AUG 2001

L5 0 S L ARGININE/CN
L6 2 S ARGININE/CN

FILE 'HCAPLUS' ENTERED AT 16:13:51 ON 22 AUG 2001

FILE 'REGISTRY' ENTERED AT 16:15:06 ON 22 AUG 2001

FILE 'HCAPLUS' ENTERED AT 16:15:13 ON 22 AUG 2001

E REPRESSOR/CT
E REPRESSORS (L) ARGININE/CT
L7 204 S ARGININE (A) REPRESSOR OR (REPRESSOR# (L) ARGININE)
L8 0 S L7 (L) L1

FILE 'CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD, HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, WPIDS' ENTERED AT 16:16:36 ON 22 AUG 2001

L9 27 S L1 (L) L7
L10 27 DUP REM L9 (0 DUPLICATES REMOVED)
L11 20 S L10 AND PY<=2000
L12 19 S L11 AND (DISRUPT? OR MUTAT? OR INACTIV?)

FILE 'REGISTRY' ENTERED AT 16:44:53 ON 22 AUG 2001

L13 1 S 74-79-3 /RN

FILE 'CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD, HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, WPIDS' ENTERED AT 16:45:06 ON 22 AUG 2001

FILE 'REGISTRY' ENTERED AT 16:45:16 ON 22 AUG 2001

SET SMARTSELECT ON
L14 SEL L13 1- CHEM : 14 TERMS
SET SMARTSELECT OFF

FILE 'CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD, HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, WPIDS' ENTERED AT 16:45:19 ON 22 AUG 2001

FILE 'REGISTRY' ENTERED AT 16:50:08 ON 22 AUG 2001

SET SMARTSELECT ON
L15 SEL L13 1- CHEM : 14 TERMS
SET SMARTSELECT OFF

FILE 'CROPU, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD, HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, WPIDS' ENTERED AT 16:50:10 ON 22 AUG 2001

L16 151137 S L15
L17 19 S L16 (L) L12
L18 19 DUP REM L17 (0 DUPLICATES REMOVED)
L19 19 S L18 AND (PREP? OR MAK? OR SYNTH? OR MANUFACT? OR PRODU?)
L20 1 S L19 AND ((DISRUPT? OR MUTAT? OR INACTIV?) (S) (ARGININE (A)

=> d 119 ibib ab 1-19

L19 ANSWER 1 OF 19 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 999267 EUROPATFULL EW 200019 FS OS

TITLE: Method for **producing L-arginine**.
Verfahren zur Herstellung von L-arginin.
Procede pour la **preparation de L-arginine**.

INVENTOR(S): Suga, Mikiko, Ajinomoto Co., Inc., 1-1 Suzuki-cho,
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Kawasaki-ku, Kawasaki-shi, Kanagawa, JP;
Nakamatsu, Tsuyoshi, Ajinomoto Co., Inc., 1-1
Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa, JP;
Kurahashi, Osamu, Ajinomoto Co., Inc., 1-1 Suzuki-cho,
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PATENT ASSIGNEE(S): Ajinomoto Co., Inc., No. 15-1, Kyobashi 1-chome,
Chuo-ku, Tokyo 104, JP

PATENT ASSIGNEE NO: 201191

AGENT: HOFFMANN - EITLE, Patent- und Rechtsanwaelte
Arabellastrasse 4, 81925 Muenchen, DE

AGENT NUMBER: 101511

OTHER SOURCE: BEPA2000034 EP 0999267 A1 0020

SOURCE: Wila-EPZ-2000-H19-T1a

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R
GB; R GR; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R
SE; R AL; R LT; R LV; R MK; R RO; R SI

PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG

PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 999267	A1	20000510

'OFFENLEGUNGS' DATE: 20000510

APPLICATION INFO.: EP 1999-120934 19991102

PRIORITY APPLN. INFO.: JP 1998-312301 19981102

JP 1999-271204 19990924

ABEN Disclosed is a **coryneform** bacterium having **L-arginine-producing** ability in which an activity of intracellular argininosuccinate **synthase** is enhanced, wherein the activity of intracellular argininosuccinate **synthase** is enhanced by, for example, increasing copy number of a gene which codes for an argininosuccinate **synthase** derived from a **coryneform** bacterium in the bacterial cell, or modifying an expression regulation sequence for the gene in the bacterial cell so that expression of the gene should be enhanced. **L-Arginine** is **produced** by culturing the bacterium having **L-arginine-producing** ability in a medium so that **L-arginine** should be **produced** and accumulated, and collecting the **L-arginine** from the medium. The present invention provides a **coryneform** bacterium of improved **L-arginine-producing** ability and an efficient method for **producing L-arginine**.

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 974647 EUROPATFULL EW 200004 FS OS
 TITLE: PROCESS FOR **PRODUCING** TARGET SUBSTANCES BY
 FERMENTATION.
 VERFAHREN ZUR HERSTELLUNG VON ZIELSUBSTANZEN DURCH
 FERMENTATION.
 PROCEDE DE **PRODUCTION** DE SUBSTANCE-CIBLE PAR
 FERMENTATION.
 INVENTOR(S): KUWABARA, Yoko, Ajinomoto Co., Inc., Tech. & Engin.Lab.,
 1-1, Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken
 210, JP;
 KIMURA, Eiichiro, Ajinomoto Co., Inc., Tech. & Engin.
 Lab., 1-1, Suzuki-cho, Kawasaki-ku, Kawasaki-shi,
 Kanagawa-ken 210, JP;
 KAWAHARA, Yoshio, Ajinomoto Co., Inc., Tech. & Engin.
 Lab., 1-1, Suzuki-cho, Kawasaki-ku, Kawasaki-shi,
 Kanagawa-ken 210, JP;
 NAKAMATSU, Tsuyoshi, Ajinomoto Co., Inc., Tech. & Engin.
 Lab., 1-1, Suzuki-cho, Kawasaki-ku, Kawasaki-shi,
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 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., No. 15-1, Kyobashi 1-chome,
 Chuo-ku, Tokyo 104, JP
 PATENT ASSIGNEE NO: 201191
 AGENT: Strehl Schuebel-Hopf & Partner, Maximilianstrasse 54,
 80538 Muenchen, DE
 AGENT NUMBER: 100941
 OTHER SOURCE: BEPA2000007 EP 0974647 A1 0064
 SOURCE: Wila-EPZ-2000-H04-T1a
 DOCUMENT TYPE: Patent
 LANGUAGE: Anmeldung in Japanisch; Veroeffentlichung in Englisch;
 Verfahren in Englisch
 DESIGNATED STATES: R CH; R DE; R DK; R ES; R FR; R GB; R IT; R LI; R NL
 PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG (Internationale
 Anmeldung)

PATENT INFORMATION:

PATENT NO	KIND DATE
EP 974647	A1 20000126
'OFFENLEGUNGS' DATE:	20000126
APPLICATION INFO.:	EP 1997-924309 19970604
PRIORITY APPLN. INFO.:	JP 1996-155575 19960617
RELATED DOC. INFO.:	WO 97-JP1886 970604 INTAKZ
	WO 9748790 971224 INTPNR

ABEN An object resides in controlling the retaining and dissociation of a
 gene extrachromosomally for efficient **production** of an
 objective substance in a fermentative manner.

By culturing and growing a microorganism containing a plasmid carrying a
 gene disadvantageously functioning for the **production** of an
 objective enzyme and a temperature-sensitive replication origin, on
 which plasmid the functional gene is solely present, at a temperature at
 which the plasmid is replicable, and continuously culturing the
 microorganism at a temperature at which the plasmid is never replicable,
 to dissociate the plasmid from the cells and continue the culturing, the
 objective substance can efficiently be **produced**. <image>

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 756007 EUROPATFULL EW 199705 FS OS
 TITLE: Method of amplifying gene using artificial transposon.
 Genvermehrungsverfahren mit kuenstlichen Transposon.
 Methode d'amplification d'un gene utilisant un
 transposon artificiel.
 INVENTOR(S): Moriya, Mika, c/o Ajinomoto Co., Inc., No. 1-1
 Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken, JP;
 Matsui, Hiroshi, c/o Ajinomoto Co., Inc., No. 1-1
 Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken, JP;
 Yokozeki, Kenzo, c/o Ajinomoto Co., Inc., No. 1-1
 Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken, JP;
 Hirano, Seiko, c/o Ajinomoto Co., Inc., No. 1-1
 Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken, JP;
 Hayakawa, Atsushi, c/o Ajinomoto Co., Inc., No. 1-1
 Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken, JP;
 Izui, Masako, c/o Ajinomoto Co., Inc., No. 1-1
 Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken, JP;
 Sugimoto, Masakazu, c/o Ajinomoto Co., Inc., No. 1-1
 Suzuki-cho, Kawasaki-ku, Kawasaki-shi, Kanagawa-ken, JP
 PATENT ASSIGNEE(S): Ajinomoto Co., Ltd., 15-1, Kyobashi 1-chome, Chuo-ku,
 Tokyo, JP
 PATENT ASSIGNEE NO: 865891
 AGENT: Hansen, Bernd, Dr. Dipl.-Chem. et al, Hoffmann, Eitle &
 Partner, Patentanwaelte, Arabellastrasse 4, 81925
 Muenchen, DE
 AGENT NUMBER: 4924
 OTHER SOURCE: ESP1997006 EP 0756007 A2 970129
 SOURCE: Wila-EPZ-1997-H05-T1a
 DOCUMENT TYPE: Patent
 LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
 DESIGNATED STATES: R DE; R ES; R GB; R IT
 PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG
 PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 756007	A2	19970129
		19970129
EP 1996-110491		19960628
PRIORITY APPLN. INFO.: JP 1995-166541		19950630

ABEN Construction

A method of amplifying a desired gene in a chromosome of a **coryneform** bacterium, which comprises forming an artificial transposon in which a drug resistance gene and the desired gene are inserted into an insertion sequence of the **coryneform** bacterium, and introducing said artificial transposon into the **coryneform** bacterium.

Effects

In accordance with the method of the present invention, a desired gene can be amplified in a chromosome in **coryneform** bacteria which are used in the industrial production of amino acids or nucleic acids, and the breeding of the **coryneform** bacteria can be improved. <image>

L19 ANSWER 4 OF 19 EUROPATFULL COPYRIGHT 2001 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 432168 EUROPATFULL EW 199642 FS PS

TITLE: GENETICALLY ENGINEERED COCCIDIOSIS VACCINE.
 GENTECHNOLOGISCH HERGESTELLTER COCCIDIOSE-IMPFSTOFF.
 VACCIN CONTRE LA COCCIDIOSE **PREPARE** PAR GENIE
 GENETIQUE.

INVENTOR(S): ANDERSON, David, M., 13509 Bailey Drive, Rockville, MA
 20850, US;
 McCANDLISS, Russell, J., 939 Pointer Ridge Dr.,
 Gaithersburg, MA 20878, US;
 STRAUSBERG, Susan, Lee, 2815 Hathaway Terrace, Silver
 Spring, MA 20906, US;
 STRAUSBERG, Robert, L., 2815 Hathaway Terrace, Silver
 Spring, MA 20906, US

PATENT ASSIGNEE(S): BRITISH TECHNOLOGY GROUP USA INC, 2200 Renaissance
 Boulevard, Gulph Mills, Pennsylvania 19406, US

PATENT ASSIGNEE NO: 1402684

AGENT: White, Martin Paul et al, Kilburn & Strode, 30 John
 Street, London WC1N 2DD, GB

AGENT NUMBER: 74783

OTHER SOURCE: EPB1996066 EP 0432168 B1 961016

SOURCE: Wila-EPS-1996-H42-T1

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R DE; R FR; R GB; R IT; R LI; R LU; R
 NL; R SE

PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT (Internationale
 Anmeldung)

PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 432168	B1	19961016
'OFFENLEGUNGS' DATE:		19910619
APPLICATION INFO.:	EP 1989-908301	19890705
PRIORITY APPLN. INFO.:	US 1988-215162	19880705
RELATED DOC. INFO.:	WO 89-US2918	890705 INTAKZ
	WO 9000403	900125 INTPNR
REFERENCE PAT. INFO.:	EP 231537 A	EP 324648 A
	EP 344808 A	WO 86-00528 A
	US 4650676 A	

L19 ANSWER 5 OF 19 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 215388 EUROPATFULL EW 198713 FS OS STA B

TITLE: Plasmid vector and a method for regulation of gene
 expression using the same.
 Plasmidvektor und ein Verfahren zur Regulierung der
 Genexpression unter Verwendung dieses Vektors.
 Vecteur de plasmide et une methode de regulation
 d'expression de gene par utilisation de ce vecteur.

INVENTOR(S): Morinaga, Yasushi Central Research Laboratories,
 Ajinomoto Co., Inc. 1-1, Suzuki-cho Kawasaki-ku,
 Kawasaki-shi Kanagawa-ken, JP;
 Tsuchiya, Makoto Central Research Laboratories,
 Ajinomoto Co., Inc. 1-1, Suzuki-cho Kawasaki-ku,
 Kawasaki-shi Kanagawa-ken, JP

PATENT ASSIGNEE(S): AJINOMOTO CO., INC., 5-8, Kyobashi 1-chome, Chuo-ku,
 Tokyo 104, JP

PATENT ASSIGNEE NO: 201190

AGENT: Strehl, Schuebel-Hopf, Groening, Schulz,
 Widenmayerstrasse 17 Postfach 22 03 45, D-8000 Muenchen
 22, DE

OTHER SOURCE: ESP1987010 EP 0215388 A1 870325

SOURCE: Wila-EPZ-1987-H13-T1

DOCUMENT TYPE: Patent
 LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
 DESIGNATED STATES: R DE; R FR; R GB
 PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG
 PATENT INFORMATION:

PATENT NO	KIND DATE
EP 215388	A1 19870325

'OFFENLEGUNGS' DATE:	19870325
APPLICATION INFO.:	EP 1986-112251 19860904
PRIORITY APPLN. INFO.:	JP 1985-197277 19850906
	JP 1986-137833 19860613

ABEN A plasmid vector capable of replicating in a **Coryneform** bacterial cell bearing a base sequence (a) functioning as a promoter in a **Coryneform** bacterium, a base sequence (b) functioning as an operator downstream from the base sequence (a), a base sequence (c) functioning as a site for ribosome binding in a **Coryneform** bacterial cell, a base sequence (d) functioning as a translation initiation codon, and a gene to be expressed which is directly ligated with the base sequence (d) and bearing a gene coding for a **repressor** protein capable of binding to the base sequence (d) functioning as an operator.

L19 ANSWER 6 OF 19 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1997025432 PCTFULL
 TITLE (ENGLISH): IMPROVED MUTANTS OF (2,5-DKG) REDUCTASE
 TITLE (FRENCH): MUTANTS AMELIORES DE (2,5 DKG) REDUCTASE
 INVENTOR(S): POWERS, David, B.; ANDERSON, Stephen
 PATENT ASSIGNEE(S): RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY; POWERS, David, B.; ANDERSON, Stephen
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9725432	A2	19970717

DESIGNATED STATES: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM ML MR NE SN TD TG

APPLICATION INFO.:	WO 1997-US97	19970109
PRIORITY (ORIGINAL):	US 1996-8/584019	19960111
	US 1996-8/585595	19960116

ABEN Mutants of 2,5-diketo-D-gluconic acid reductase A and B, enzymes used to **produce** 2-keto-L-gulononic acid, a precursor of ascorbic acid (vitamin C), are **prepared** by site-directed mutagenesis. These mutants may exhibit one or more of the following characteristics: improved temperature stability, increased resistance to substrate inhibition, increased turnover of the substrate by the enzyme and increased affinity for the substrate.

ABF La presente invention concerne la **preparation**, par mutagenese dirigee sur un site, de mutants de reductase A et B d'acide 2,5-diceto-D-gluconique, c'est-a-dire des enzymes servant a la **production** de l'acide 2-ceto-L-gulonique qui est un precurseur de l'acide ascorbique (vitamine C). Ces mutants peuvent presenter l'une au moins des caracteristiques suivantes: stabilite thermique amelioree, resistance accrue a l'inhibition du substrat, exploitation plus importante du substrat par l'enzyme et affinite accrue pour le substrat.

L19 ANSWER 7 OF 19 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1994005772 PCTFULL
 TITLE (ENGLISH): IMPROVED ENZYMES FOR THE **PRODUCTION** OF
 2-KETO-L-GULONIC ACID
 TITLE (FRENCH): ENZYMES AMELIOREES POUR LA **PRODUCTION**
 D'ACIDE 2-CETO-L-GULONIQUE
 INVENTOR(S): LAZARUS, Robert, A.; HURLE, Mark; ANDERSON, Stephen;
 POWERS, David, B.
 PATENT ASSIGNEE(S): RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE

WO 9405772	A1	19940317

DESIGNATED STATES: AU CA FI JP KP KR NZ VN AT BE CH DE DK ES FR GB GR IE
 IT LU MC NL PT SE
 APPLICATION INFO.: WO 1993-US8411 19930907
 PRIORITY (ORIGINAL): US 1992-7/941414 19920908
 ABEN Mutants of 2,5-diketo-D-gluconic acid reductase A, an enzyme used
 to **produce** 2-keto-L-gulonic acid, a precursor of ascorbic acid
 (vitamin
 C) are **prepared** by site-directed mutagenesis. These mutants
 have
 increased catalytic activity, increased expression levels, and/or
 enhanced temperature stability.
 ABF On **prepare**, par mutagenese dirigee, des mutants d'acide 2, 5-
 diceto-D-gluconique reductase A, une enzyme utilisee pour
produire
 l'acide 2-ceto-L-gulonique, qui est un precurseur de l'acide ascorbique
 (vitamine C). Ces mutants presentent une activite catalytique accrue,
 des niveaux d'expression accrus, et/ou une meilleure stabilite thermique.

L19 ANSWER 8 OF 19 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1990000403 PCTFULL
 TITLE (ENGLISH): GENETICALLY ENGINEERED COCCIDIOSIS VACCINE
 TITLE (FRENCH): VACCIN CONTRE LA COCCIDIOSE **PREPARE** PAR
 GENIE GENETIQUE
 INVENTOR(S): ANDERSON, David, M.; McCANDLISS, Russell, J.;
 STRAUSBERG, Susan, Lee; STRAUSBERG, Robert, L.
 PATENT ASSIGNEE(S): GENEX CORPORATION; ANDERSON, David, M.; McCANDLISS,
 Russell, J.; STRAUSBERG, Susan, Lee; STRAUSBERG,
 Robert, L.
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE

WO 9000403	A1	19900125

DESIGNATED STATES: AT BE CH DE FR GB IT JP LU NL SE US
 APPLICATION INFO.: WO 1989-US2918 19890705
 PRIORITY (ORIGINAL): US 1988-215162 19880705
 ABEN A cloned gene or fragment thereof encodes antigenic proteins that
 bind with a monoclonal or polyvalent antibody that is directed against
 an antigenic protein of avian coccidia.
 ABF Gene clone ou fragment de celui-ci codant pour des proteines
 antigeniques qui se lient a un anticorps monoclonal ou polyvalent dirige
 contre une proteine antigenique des coccidies aviennes.

L19 ANSWER 9 OF 19 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1988001646 PCTFULL
 TITLE (ENGLISH): UNIVERSAL SYSTEM FOR TRANSPOSON MUTAGENESIS
 TITLE (FRENCH): SYSTEME UNIVERSEL DE MUTAGENESE DE TRANSPOSONS

INVENTOR(S): KOZLOWSKI, Maya; GLASSE-DAVIES, Roger, Wayne
 PATENT ASSIGNEE(S): ALLELIX INC.; KOZLOWSKI, Maya; GLASSE-DAVIES, Roger, Wayne
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
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	WO 8801646	A1 19880310
DESIGNATED STATES:	AT BE CH DE FR GB IT JP LU NL SE US	
APPLICATION INFO.:	WO 1987-GB598	19870825
PRIORITY (ORIGINAL):	US 1986-900428	19860826

ABEN Universal system for inducing genetic transposition in prokaryotic or eukaryotic cells. The system is universal in that it provides a means for inducing transposition in any organism. The invention further discloses plasmid vectors capable of mediating such genetic transposition, and novel uses for transposable elements. Le systeme universel decrit permet l'induction d'une transposition genetique dans des cellules prokaryotiques ou eukaryotiques. Ce systeme est dit universel dans le sens qu'il fournit un moyen d'induire une transposition dans n'importe quel organisme. La presente invention decrit en outre des vecteurs de plasmides capables de vehiculer une telle transposition genetique ainsi qu'un nouvel emploi d'elements transposables.

L19 ANSWER 10 OF 19 PCTFULL COPYRIGHT 2001 MicroPatent
 ACCESSION NUMBER: 1987000202 PCTFULL
 TITLE (ENGLISH): COMPOSITE PLASMIDS FOR AMINO ACID **SYNTHESIS**
 TITLE (FRENCH): PLASMIDES COMPOSITES ET **SYNTHESE** D'ACIDES AMINES

INVENTOR(S): EDWARDS, Mark, Richard; TAYLOR, Paul, Phillip; HUNTER, Michael, George; FOTHERINGHAM, Ian, Graham
 PATENT ASSIGNEE(S): THE NUTRASWEET COMPANY
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
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	WO 8700202	A1 19870115
DESIGNATED STATES:	DE FR GB IT JP	
APPLICATION INFO.:	WO 1986-US1353	19860624
PRIORITY (ORIGINAL):	US 1985-747732	19850624

ABEN Composite plasmids containing multiple genes in transcriptional units. These composite plasmids are useful for the **production** of amino acids, particularly aromatic amino acids.

ABF La presente invention se rapporte a des plasmides composites contenant des genes multiples en unites de transcription. Ces plasmides composites sont utiles dans la **production** d'acides amines, en particulier d'acides amines aromatiques.

L19 ANSWER 11 OF 19 USPATFULL
 ACCESSION NUMBER: 1998:108248 USPATFULL
 TITLE: Method of amplifying genes using artificial transposons in coryneform bacteria
 INVENTOR(S): Moriya, Mika, Kawasaki, Japan
 Matsui, Hiroshi, Kawasaki, Japan
 Yokozeki, Kenzo, Kawasaki, Japan
 Hirano, Seiko, Kawasaki, Japan
 Hayakawa, Atsushi, Kawasaki, Japan
 Izui, Masako, Kawasaki, Japan
 Sugimoto, Masakazu, Kawasaki, Japan
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5804414		19980908	<--
APPLICATION INFO.:	US 1996-674168		19960701	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1995-166541	19950630
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Railey, II, Johnny F.	
LEGAL REPRESENTATIVE:	Oblon, Spivak, McClelland, Maier & Neustadt, P.C.	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	38 Drawing Figure(s); 38 Drawing Page(s)	
LINE COUNT:	2733	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of amplifying a desired gene in a chromosome of a coryneform bacterium, which comprises forming an artificial transposon in which a drug resistance gene and the desired gene are inserted into an insertion sequence of the coryneform bacterium, and introducing said artificial transposon into the coryneform bacterium. In accordance with the method of the present invention, a desired gene can be amplified in a chromosome in coryneform bacteria which are used in the industrial **production** of amino acids or nucleic acids.

L19 ANSWER 12 OF 19 USPATFULL

ACCESSION NUMBER: 1998:6787 USPATFULL

TITLE: Isolated protein from Eimeria useful as a cross species vaccine

INVENTOR(S): Anderson, David M., Rockville, MD, United States
 McCandliss, Russell J., Gaithersburg, MD, United States
 Strausberg, Susan Lee, Silver Spring, MD, United States
 Strausberg, Robert L., Silver Spring, MD, United States
 Ruff, Michael D., Bowie, MD, United States
 Danforth, Harry D., Severn, MD, United States
 Augustine, Patricia C., Laurel, MD, United States

PATENT ASSIGNEE(S): British Technology Group USA Inc., Gulph Mills, PA, United States (U.S. corporation)
 The United States of America as represented by the Department of Agriculture, Washington, DC, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5709862		19980120	<--
APPLICATION INFO.:	US 1993-148279		19931108	(8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1992-879137, filed on 5 May 1992, now patented, Pat. No. US 5279960 which is a continuation of Ser. No. US 1988-215162, filed on 5 Jul 1988, now abandoned which is a continuation-in-part of Ser. No. US 1985-746520, filed on 19 Jun 1985, now abandoned And a continuation-in-part of Ser. No. US 1984-627811, filed on 5 Jul 1984, now abandoned			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Caputa, Anthony C.			
LEGAL REPRESENTATIVE:	Banner & Witcoff, Ltd.			
NUMBER OF CLAIMS:	2			
EXEMPLARY CLAIM:	2			
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 15 Drawing Page(s)			
LINE COUNT:	2682			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cloned gene or fragment thereof encodes antigenic proteins that bind with a monoclonal or polyvalent antibody that is directed against an antigenic protein of avian coccidia.

L19 ANSWER 13 OF 19 USPATFULL

ACCESSION NUMBER: 97:70926 USPATFULL

TITLE: Eimeria antigenic composition which elicits antibodies against avian coccidiosis

INVENTOR(S): Jacobson, James W., Rockville, MD, United States
Strausberg, Robert L., Silver Spring, MD, United States
Wilson, Susan D., Rockville, MD, United States
Pope, Sharon H., Gaithersburg, MD, United States
Strausberg, Susan Lee, Silver Spring, MD, United States
Ruff, Michael D., Bowie, MD, United States
Augustine, Patricia C., Laurel, MD, United States
Danforth, Harry D., Severn, MD, United States

PATENT ASSIGNEE(S): BTG USA Inc., Gulph Mills, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5656485		19970812 <--
APPLICATION INFO.:	US 1996-691454		19960802 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-484387, filed on 7 Jun 1995, now patented, Pat. No. US 5597571 which is a division of Ser. No. US 1993-148432, filed on 8 Nov 1993, now patented, Pat. No. US 5482709, issued on 9 Jan 1996 which is a division of Ser. No. US 1990-581693, filed on 12 Sep 1990, now patented, Pat. No. US 5273901, issued on 28 Dec 1993 which is a continuation-in-part of Ser. No. US 1988-215162, filed on 5 Jul 1988, now abandoned which is a continuation-in-part of Ser. No. US 1985-746520, filed on 19 Jun 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-627811, filed on 5 Jul 1984, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Budens, Robert D.		
ASSISTANT EXAMINER:	Scheiner, Laurie		
NUMBER OF CLAIMS:	5		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 12 Drawing Page(s)		
LINE COUNT:	1083		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel recombinant antigenic proteins of avian coccidiosis, and fragments thereof containing antigenic determinants, and to the genes that encode the antigenic peptides. This invention also relates to vaccines made using the novel antigenic proteins of avian coccidiosis and to methods of immunizing chickens against avian coccidia.

L19 ANSWER 14 OF 19 USPATFULL

ACCESSION NUMBER: 97:56556 USPATFULL

TITLE: Plasmid vector and a method for regulation of gene expression using the same

INVENTOR(S): Morinaga, Yasushi, Yokohama, Japan
Tsuchiya, Makoto, Kawasaki, Japan

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5643790		19970701 <--

APPLICATION INFO.: US 1995-389772 19950216 (8)
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-167112, filed on 16 Dec 1993, now patented, Pat. No. US 5426050 which is a continuation of Ser. No. US 1993-35502, filed on 22 Mar 1993, now abandoned which is a continuation of Ser. No. US 1991-774374, filed on 10 Oct 1991, now abandoned which is a continuation of Ser. No. US 1989-339876, filed on 18 Apr 1989, now abandoned which is a continuation of Ser. No. US 1986-901642, filed on 29 Aug 1986, now abandoned

	NUMBER	DATE
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PRIORITY INFORMATION:	JP 1985-197277	19850906
	JP 1986-137833	19860613
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Fleisher, Mindy	
ASSISTANT EXAMINER:	Degen, Nancy J.	
LEGAL REPRESENTATIVE:	Oblon, Spivak, McClelland, Maier & Neustadt, P.C.	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	961	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A plasmid vector capable of replicating in a Coryneform bacterial cell bearing a base sequence (a) functioning as an promoter in a Coryneform bacterium, a base sequence (b) functioning as an operator downstream from the base sequence (a), a base sequence (c) functioning as a site for ribosome binding in a Coryneform bacterial cell, a base sequence (d) functioning as a translation initiation codon, and a gene to be expressed which is directly ligated with the base sequence (d) and bearing a gene coding for a repressor protein capable of binding to the base sequence (d) functioning as an operator.

L19 ANSWER 15 OF 19 USPATFULL

ACCESSION NUMBER: 97:7683 USPATFULL
 TITLE: Eimeria antigenic composition which elicits antibodies against avian coccidiosis
 INVENTOR(S): Jacobson, James W., Rockville, MD, United States
 Strausberg, Robert L., Silver Spring, MD, United States
 Wilson, Susan D., Rockville, MD, United States
 Pope, Sharon H., Gaithersburg, MD, United States
 Strausberg, Susan L., Silver Spring, MD, United States
 Ruff, Michael D., Bowie, MD, United States
 Augustine, Patricia C., Laurel, MD, United States
 Danforth, Harry D., Severn, MD, United States
 PATENT ASSIGNEE(S): British Technology Group USA Inc., Gulph Mills, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 5597571		19970128 <--
APPLICATION INFO.:	US 1995-484387		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-148432, filed on 8 Nov 1993, now patented, Pat. No. US 5482709 which is a division of Ser. No. US 1990-581693, filed on 12 Sep 1990, now patented, Pat. No. US 5273901 which is a continuation-in-part of Ser. No. US 1988-215162, filed on 5 Jul 1988, now abandoned which is a continuation-in-part of Ser. No. US 1985-746520, filed on 19 Jun 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-627811, filed on 5 Jul 1984, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Scheiner, Laurie
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein and Fox P.L.L.C.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1070

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel recombinant antigenic proteins of avian coccidiosis, and fragments thereof containing antigenic determinants, and to the genes that encode the antigenic peptides. This invention also relates to vaccines made using the novel antigenic proteins of avian coccidiosis and to methods of immunizing chickens against avian coccidia.

L19 ANSWER 16 OF 19 USPATFULL

ACCESSION NUMBER: 96:3507 USPATFULL

TITLE: Eimeria antigenic composition which elicits antibodies against avian coccidiosis

INVENTOR(S): Jacobson, James W., Rockville, MD, United States
Strausberg, Robert L., Silver Spring, MD, United States
Wilson, Susan D., Rockville, MD, United States
Pope, Sharon H., Gaithersburg, MD, United States
Strausberg, Susan L., Silver Spring, MD, United States
Ruff, Michael D., Bowie, MD, United States
Augustine, Patricia C., Laurel, MD, United States
Danforth, Harry D., Severn, MD, United States

PATENT ASSIGNEE(S): British Technology Group USA Inc., Gulph Mills, PA, United States (U.S. corporation)
The United States of America as represented by the Dept. of Agriculture, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5482709		19960109 <--
APPLICATION INFO.:	US 1993-148432		19931108 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1990-581693, filed on 12 Sep 1990, now patented, Pat. No. US 5273901 which is a continuation-in-part of Ser. No. US 1988-215162, filed on 5 Jul 1988 which is a continuation-in-part of Ser. No. US 1985-746520, filed on 19 Jun 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-627811, filed on 5 Jul 1984, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Mosher, Mary E.
ASSISTANT EXAMINER: Scheiner, Laurie
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1058

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel recombinant antigenic proteins of avian coccidiosis, and fragments thereof containing antigenic determinants, and to the genes that encode the antigenic peptides. This invention also relates to vaccines made using the novel antigenic proteins of avian coccidiosis and to methods of immunizing chickens against avian coccidia.

L19 ANSWER 17 OF 19 USPATFULL

ACCESSION NUMBER: 95:54321 USPATFULL
 TITLE: Plasmid vectors for expression of genes in coryneform bacteria
 INVENTOR(S): Morinaga, Yasushi, Kawasaki, Japan
 Tsuchiya, Makoto, Kawasaki, Japan
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5426050		19950620 <--
APPLICATION INFO.:	US 1993-167112		19931216 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-35502, filed on 22 Mar 1993, now abandoned which is a continuation of Ser. No. US 1991-774374, filed on 10 Oct 1991, now abandoned which is a continuation of Ser. No. US 1989-339876, filed on 18 Apr 1989, now abandoned which is a continuation of Ser. No. US 1986-901642, filed on 29 Aug 1986, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1985-197277	19850906
	JP 1986-137833	19860613
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Schwartz, Richard A.	
ASSISTANT EXAMINER:	Carter, Philip W.	
LEGAL REPRESENTATIVE:	Oblon, Spivak, McClelland, Maier & Neustadt	
NUMBER OF CLAIMS:	2	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	909	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A recombinant plasmid vector is provided which is capable of replicating and expressing in a Coryneform bacterial cell, which plasmid vector is pEC 701, pEC 702, pEC 801, pEC 830 or pEC 901.

L19 ANSWER 18 OF 19 USPATFULL

ACCESSION NUMBER: 94:5814 USPATFULL
 TITLE: 25 KD coccidial antigen of eimeria tenella
 INVENTOR(S): Anderson, David M., Rockville, MD, United States
 McCandliss, Russell J., Gaithersburg, MD, United States
 Strausberg, Susan L., Silver Spring, MD, United States
 Strausberg, Robert L., Silver Spring, MD, United States
 Ruff, Michael D., Bowie, MD, United States
 Danforth, Harry D., Severn, MD, United States
 Augustine, Patricia C., Laurel, MD, United States
 PATENT ASSIGNEE(S): Enzon Corp., Piscataway, NJ, United States (U.S. corporation)
 U.S.A. Dept. of Agriculture, Washington, DC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5279960		19940118 <--
APPLICATION INFO.:	US 1992-879137		19920505 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1988-215162, filed on 5 Jul 1988, now abandoned which is a continuation-in-part of Ser. No. US 1985-746520, filed on 19 Jun 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-627811, filed on 5 Jul 1984, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

PRIMARY EXAMINER: Lacey, David L.
ASSISTANT EXAMINER: Nisbet, T. Michael
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)
LINE COUNT: 2607

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cloned gene or fragment thereof encodes antigenic proteins that bind with a monoclonal or polyvalent antibody that is directed against an antigenic protein of avian coccidia.

L19 ANSWER 19 OF 19 USPATFULL

ACCESSION NUMBER: 93:109000 USPATFULL

TITLE: Genetically engineered coccidiosis sporozoite 21.5 Kb antigen, ac-6b

INVENTOR(S): Jacobson, James W., Rockville, MD, United States
Strausberg, Robert L., Silver Spring, MD, United States
Wilson, Susan D., Rockville, MD, United States
Pope, Sharon H., Gaithersburg, MD, United States
Strausberg, Susan L., Silver Spring, MD, United States
Ruff, Michael D., Bowie, MD, United States
Augustine, Patricia C., Laurel, MD, United States
Danforth, Harry D., Severn, MD, United States

PATENT ASSIGNEE(S): Enzon Corp., S. Plainfield, NJ, United States (U.S. corporation)
U.S. Dept. of Agriculture, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5273901		19931228 <--
APPLICATION INFO.:	US 1990-581693		19900912 (7)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1988-215162, filed on 5 Jul 1988 which is a continuation-in-part of Ser. No. US 1985-746520, filed on 19 Jun 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-627811, filed on 5 Jul 1984, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chan, Y. Christina
ASSISTANT EXAMINER: Nisbet, T. Michael
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 1018

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel recombinant antigenic proteins of avian coccidiosis, and fragments thereof containing antigenic determinants, and to the genes that encode the antigenic peptides. This invention also relates to vaccines made using the novel antigenic proteins of avian coccidiosis and to methods of immunizing chickens against avian coccidia.

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l15 and arginine	3

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USPT,PGPB	l15 and arginine	3	<u>L16</u>
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USPT,PGPB	l13 or l12 or l11 or l10 or l9 or l8 or l7 or l6 or l5	16818	<u>L14</u>
USPT,PGPB	((((536/23.7)!.CCLS.))	1343	<u>L13</u>
USPT,PGPB	((((530/350)!.CCLS.))	5664	<u>L12</u>
USPT,PGPB	((((435/455)!.CCLS.))	879	<u>L11</u>
USPT,PGPB	((((435/440)!.CCLS.))	324	<u>L10</u>
USPT,PGPB	((((435/320.1)!.CCLS.))	9621	<u>L9</u>
USPT,PGPB	((((435/252.32)!.CCLS.))	106	<u>L8</u>
USPT,PGPB	((((435/252.3)!.CCLS.))	4833	<u>L7</u>
USPT,PGPB	((((435/252.1)!.CCLS.))	1239	<u>L6</u>
USPT,PGPB	((((435/243)!.CCLS.))	847	<u>L5</u>
USPT,PGPB	((435/114)!.CCLS.)	59	<u>L4</u>
USPT,PGPB	l1 and corynebacter\$4	0	<u>L3</u>
USPT,PGPB	l1 and Coryneform bacteria	0	<u>L2</u>
USPT,PGPB	arginine\$1 repressor\$1	4	<u>L1</u>

US-PAT-NO: 5198346
DOCUMENT-IDENTIFIER: US 5198346 A

TITLE: Generation and selection of novel DNA-binding proteins and polypeptides

DATE-ISSUED: March 30, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ladner; Robert C.	Ijamsville	MD	N/A	N/A
Guterman; Sonia K.	Belmont	MA	N/A	N/A
Kent; Rachel B.	Boxborough	MA	N/A	N/A
Ley; Arthur C.	Newton	MA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/489

Full	Title	Citation	Front	Review	Classification	Date	Reference
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KWIC	Draw Desc	Image
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☐ 4. Document ID: US 5096815 A

L1: Entry 4 of 4

File: USPT

Mar 17, 1992

US-PAT-NO: 5096815

DOCUMENT-IDENTIFIER: US 5096815 A

TITLE: Generation and selection of novel DNA-binding proteins and polypeptides

DATE-ISSUED: March 17, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ladner; Robert C.	Ijamsville	MD	N/A	N/A
Guterman; Sonia K.	Belmont	MA	N/A	N/A
Kent; Rachel B.	Wilmington	MA	N/A	N/A
Ley; Arthur C.	Newton	MA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1

Full	Title	Citation	Front	Review	Classification	Date	Reference
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KWIC	Draw Desc	Image
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arginine\$1 repressor\$1

4

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Documents, starting with Document:

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Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6127606 A

L1: Entry 1 of 4

File: USPT

Oct 3, 2000

US-PAT-NO: 6127606

DOCUMENT-IDENTIFIER: US 6127606 A

TITLE: Method of using transactivation proteins to control expression in transgenic plants

DATE-ISSUED: October 3, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bennett; Malcolm	Coventry	N/A	N/A	GBX
May; Sean	Earlsdon	N/A	N/A	GBX
Ramsay; Nicola	Bishopston	N/A	N/A	GBX

US-CL-CURRENT: 800/298; 435/320.1, 435/419, 435/468, 536/23.6, 536/23.7, 536/24.1,
800/278, 800/295

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☐ 2. Document ID: US 5867402 A

L1: Entry 2 of 4

File: USPT

Feb 2, 1999

US-PAT-NO: 5867402

DOCUMENT-IDENTIFIER: US 5867402 A

TITLE: Computational analysis of nucleic acid information defines binding sites

DATE-ISSUED: February 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schneider; Thomas D.	Frederick	MD	N/A	N/A
Rogan; Peter K.	Lebanon	PA	N/A	N/A

US-CL-CURRENT: 702/20; 703/2

Full	Title	Citation	Front	Review	Classification	Date	Reference	KWIC	Draw Desc	Image
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☐ 3. Document ID: US 5198346 A

L1: Entry 3 of 4

File: USPT

Mar 30, 1993

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Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 6127606 A

L15: Entry 1 of 3

File: USPT

Oct 3, 2000

US-PAT-NO: 6127606

DOCUMENT-IDENTIFIER: US 6127606 A

TITLE: Method of using transactivation proteins to control expression in transgenic plants

DATE-ISSUED: October 3, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bennett; Malcolm	Coventry	N/A	N/A	GBX
May; Sean	Earlsdon	N/A	N/A	GBX
Ramsay; Nicola	Bishopston	N/A	N/A	GBX

US-CL-CURRENT: 800/298; 435/320.1, 435/419, 435/468, 536/23.6, 536/23.7, 536/24.1,
800/278, 800/295

Full	Title	Citation	Front	Review	Classification	Date	Reference
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KMIC	Draw Desc	Image
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☐ 2. Document ID: US 5198346 A

L15: Entry 2 of 3

File: USPT

Mar 30, 1993

US-PAT-NO: 5198346

DOCUMENT-IDENTIFIER: US 5198346 A

TITLE: Generation and selection of novel DNA-binding proteins and polypeptides

DATE-ISSUED: March 30, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ladner; Robert C.	Ijamsville	MD	N/A	N/A
Guterman; Sonia K.	Belmont	MA	N/A	N/A
Kent; Rachel B.	Boxborough	MA	N/A	N/A
Ley; Arthur C.	Newton	MA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/489

Full	Title	Citation	Front	Review	Classification	Date	Reference
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KMIC	Draw Desc	Image
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☐ 3. Document ID: US 5096815 A

L15: Entry 3 of 3

File: USPT

Mar 17, 1992

US-PAT-NO: 5096815
DOCUMENT-IDENTIFIER: US 5096815 A

TITLE: Generation and selection of novel DNA-binding proteins and polypeptides

DATE-ISSUED: March 17, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ladner; Robert C.	Ijamsville	MD	N/A	N/A
Guterman; Sonia K.	Belmont	MA	N/A	N/A
Kent; Rachel B.	Wilmington	MA	N/A	N/A
Ley; Arthur C.	Newton	MA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1

Full	Title	Citation	Front	Review	Classification	Date	Reference
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KWIC	Draw Desc	Image
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l14 and l1	3

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